## ASH GROVE CEMENT COMPANY

WESTERN REGION '

September 17, 1997

Mr. Dave Kircher Puget Sound Air Pollution Control Agency 110 Union Street, Suite 500 Scattle, WA. 98101-2038

Re: Ash Grove Cement Order of Approval No. 5730

Dear Mr. Kircher:

On September 5 several Ash Grove representatives conferred by phone with Jay Willenberg and Fred Austin, to develop an agreed methodology for amending Ash Grove's approval order to address sulfur dioxide emissions during the preheat phase of start-up. We believe that Ash Grove and PSAPCA reached consensus on the form of a new emission limit will not increase allowable emissions. The purpose of this letter is to seek PSAPCA's approval of the methodology we discussed on September 5 to establish a new pre-heat SO<sub>2</sub> limit.

Approval Order 5730 limits start-up SO<sub>2</sub> emissions to 200 ppm corrected to 10% oxygen over a one hour average. SO<sub>2</sub> emissions during pre-heat can substantially exceed 200 ppm, but stack flow rates during pre-heat are much lower than during normal operation of the kiln. The maximum mass emission rate allowed by Order 5730 during normal operation is equivalent to 212 pounds/hour. This number derives from the stack design flow rate of 117,977 dscfm multiplied by the permit concentration limit of 180 ppm, corrected to 10% oxygen.

Ash Grove has two SO<sub>2</sub> CEMs. The old Lear- Siegler monitor will record data over a range from zero to 1000 ppm, but it will not meet EPA performance specifications because it continually overstates actual stack concentrations. The newer Hartman Braun RADAS II monitor meets EPA performance specifications, but it is calibrated to read accurately over a scale of zero to 200 ppm. As a result the RADAS II monitor cannot be used to record maximum SO<sub>2</sub> concentrations experienced during pre-heat.

Ash Grove proposes to run a 90 day trial period during which Ash Grove will operate both SO<sub>2</sub> monitors during each start-up of the kiln. Ash Grove will use the Lear Siegler monitor to measure the highest hourly SO<sub>2</sub> concentration recorded during any start-up event. Ash Grove and PSAPCA will then calculate the highest hourly average stack flow rate at which mass emissions will not exceed 212 pounds per hour, assuming worst case SO<sub>2</sub> concentrations recorded during the trial. Order 5730 will be amended to state that the 200 ppm start-up limit will

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apply during all hours of startup except pre-heat. Preheat SO<sub>2</sub> emissions will be limited by a maximum flow rate limit, derived as described above. The permit will require Ash Grove to continuously monitor stack flow rate during pre-heat, as a surrogate for monitoring SO<sub>2</sub> concentrations. Pre-heat will be defined as a period beginning when the preheater's 5<sup>th</sup> stage exit temperature first exceeds 1050 degrees F, and ending when feed is first added to the kiln, with a maximum length not to exceed 10 hours.

The duration of the trial period can be extended beyond 90 days, if Ash Grove and PSAPCA conclude that the data recorded during the trial period does not provide a reasonable basis to determine the worst case pre-heat SO<sub>2</sub> concentration.

At this time there are 17 NOVs outstanding against Ash Grove for SO<sub>2</sub> permit exceedances during start-up. In each case Ash Grove has explained to PSAPCA that the excess emissions are "unavoidable" within the meaning of WAC 173-400-107. The agreement between Ash Grove and PSAPCA must include withdrawal of those NOVs and a commitment to issue no more NOVs for SO<sub>2</sub> exceedances during pre-heat, prior to the time that PSAPCA amends Order 5730 as described above. The circumstances that cause pre-heat SO<sub>2</sub> concentrations to exceed 200 ppm clearly fit the criteria of WAC 173-400-107(4): "Excess emissions due to startup or shutdown conditions shall be considered unavoidable provided the source... adequately demonstrates that the excess emissions could not have been prevented through careful planning and design..." If PSAPCA still has questions on this point, we need to resolve them before proceeding with the trial period.

Please talk to Jay and Fred, and let me know if PSAPCA supports the program outlined above. As always, Ash Grove appreciates PSAPCA's perseverance in striving to ensure that the permit limits regulating Ash Grove are achievable.

Very truly yours,

Gerald J. Brown

Manager, Safety and Environmental

cc: HV MD TG